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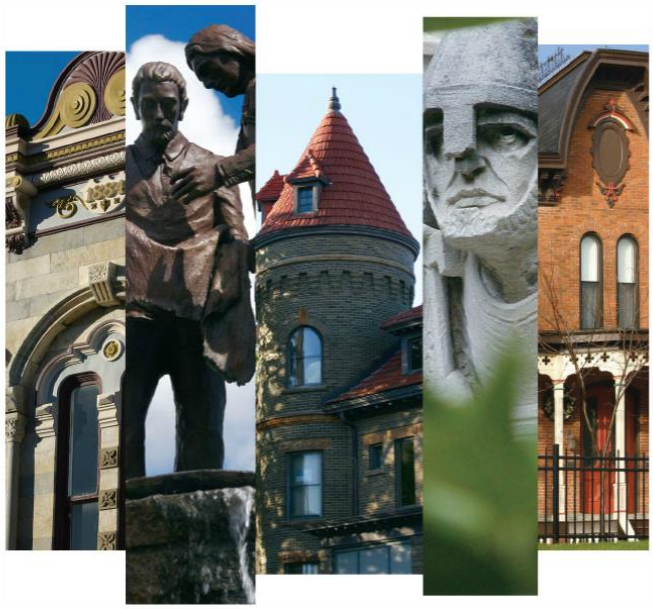
Understanding Faribault's Economy

A REPORT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

Authored by Brigid Tuck and Elizabeth Templin



IN PARTNERSHIP WITH FARIBAULT ECONOMIC DEVELOPMENT AUTHORITY

City Of Faribault

Understanding Faribault's Economy

A REPORT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

November 2016

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Table of Contents

List of Charts

List of Tables

List of Maps

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EXECUTIVE SUMMARY: UNDERSTANDING FARIBAULT'S ECONOMY

Faribault Minnesota is a community of 23,000 people located in South Central Minnesota. The city of Faribault actively pursues economic and community development efforts. To be effective in these efforts, the Faribault Economic Development Authority (EDA) contracted with University of Minnesota Extension to assist in understanding the city's economy. With sound knowledge of its economic assets, strengths, and weaknesses, the EDA is equipped to make informed decisions regarding resources and targeted economic development initiatives.

The Faribault EDA and Extension engaged in a six-month, four-stage process to understand the economy. Steps included identifying relevant economic data, reviewing the data with experts, discussing the information with the EDA, and preparing this report, which will serve as a resource for future discussions.

There are multiple methods for measuring and describing an economy. *This project, however, intentionally focused on Faribault's competitive advantages.* During the process, dozens of data sources and points were considered. The data included in this report provides a broad overview of Faribault's economy with a specific focus on its strengths—a strong, diverse manufacturing base, relatively strong growth in employment and wages, and a growing population of working age adults in the face of statewide workforce shortages.

Faribault's Commuting Patterns

- Faribault's commuting patterns are fairly balanced, especially compared to other communities in the area. Approximately 4,500 people both live and work in Faribault. On a daily basis, 5,900 workers commute to Faribault and 5,700 commute to other locations.

Faribault's Current Economy

- Nearly 11,400 Faribault residents are of working age (between 19 and 64 years of age). Of those, 10,200 are working. Unemployment rates are low among Faribault residents, averaging between 6.4 and 4.5% in 2015.
- Job growth in Faribault has been slow. Overall, the number of jobs in Faribault grew by 3% between 2000 and 2014. Between 2012 and 2014, however, the number of jobs in Faribault grew by 6.3%, thus recent performance has been strong.
- Faribault is a manufacturing-based economy. Manufacturing is the largest private industry in the city, employing 17% of all people working in Faribault. Manufacturing jobs are twice as concentrated in Faribault as compared to the national average.
- Within manufacturing, four sectors account for 85% of jobs. They are food, machinery, fabricated metal, and nonmetallic minerals.
- Major manufacturing occupations in Faribault include: team assemblers; welders, cutters, solderers, and brazers; packaging and filling machine operators; first-line supervisors; inspectors, testers, and sorters; and assemblers and fabricators.
- Faribault's 2014 average weekly wage across all industries was $756. This translates into $19 per hour or $39,000 per year. Wages were highest in the construction ($1,017), manufacturing ($952), and public administration ($934) industries.
- After adjusting for inflation, Faribault's wages grew by 7.2% compared to 6% in Minnesota between 2000 and 2014.

- The three fastest growing industries in Faribault between 2001 and 2015 were health care and social assistance, crop and animal production, and transportation and warehousing. All three industries outperformed national and industry trends.
- Harvard's Cluster Mapping Project identifies nine traded clusters in the Faribault-Northfield area. The biggest clusters in the region are education, food processing, and production technology.
- The mapping project also identifies two main industries in Faribault with growth potential—distribution and electronic commerce and transportation and logistics. These are industries that, while relatively small, have been growing at a pace greater than the national growth rate.
- Faribault has an intriguing strength around local real estate, construction, and development. The city has a significant number of specialty contractor employees in two subsectors: electrical and plumbing contractors and heating and air conditioning contractors.

Workforce in Faribault

- Population growth has been moderate in Faribault but has outpaced the state as a whole. Total population increased by 33% between 2001 and 2014, compared to Minnesota's 10% increase.
- Faribault recorded modest growth in its prime working age population (ages 30 to 50). Overall, the total number of Faribault residents in the prime working age population increased by 20% between 2001 and 2014. This also outpaced Greater Minnesota.
- Growth in the White, Hispanic and Black, non-Hispanic populations are projected to primarily fuel growth in Faribault's working age population between 2015 and 2025.
- Current educational attainment by Faribault residents ages 25 and older aligns closely to Minnesota residents. Growth in the number of workers with associates degrees, bachelor's degrees, or graduate degrees was strong between 2001 and 2014.
- In 2014, Faribault's median household income was $50,400. In Rice County, the estimated cost of living for a family with two workers (one full-time, one part-time) and one child is $49,130. This is just below Faribault's median income.

Conclusions

When coupling the data with local knowledge and observations, the following conclusions were reached about Faribault's economy:

- *Faribault's geographic location is an advantage*. Proximity to Interstate 35 and major population centers provides Faribault businesses with easy access to a large workforce and to market and trade opportunities.
- *Faribault has a stable and growing workforce*. While most of Greater Minnesota is experiencing declines in the prime working age population, Faribault is expected to grow. A growing workforce will be attractive to businesses.
- *Faribault has a strong economic base*. Overall, Faribault's economy has performed well. The number of jobs in Faribault is growing**.** Faribault wages, while comparatively lower, are also increasing. Faribault is a manufacturing-based economy.
- *Faribault has a strong education and training system*. In addition to the K-12 systems, South Central College is proactive in developing training programs and apprenticeships in concert with local businesses.
- *Faribault has a strong network of support for businesses*. The Faribault EDA, the Community and Economic Development Department, and a network of economic development partners provide support for Faribault businesses.
- *Faribault is committed to actively addressing challenges*. In its recent Vision 2040 planning process, Faribault identified economic development as one of its top priorities.

PROJECT BACKGROUND

Faribault, Minnesota is a community of 23,000 people located in South Central Minnesota. Easy access to Interstate 35, a major north-south corridor in the state, combined with its location near the Twin Cities metro and Rochester, provides Faribault with many economic development opportunities.

The city of Faribault is active in economic and community development efforts to capitalize on these opportunities. The city recognizes the need to be involved in economic development. In 2015, the citywide Vision 2040 identified economic development as one of its top five priorities.

In order to be effective at economic and community development, the Faribault Economic Development Authority (EDA) wants to understand the Faribault economy. A deep knowledge of the economy will assist the EDA in making critical decisions about investments of both time and resources. The information will be useful in guiding both internal discussions regarding the future of economic development efforts and also the message of, "Who is Faribault?" to external groups and businesses interested in locating in Faribault.

There are multiple methods for measuring and describing an economy. *This project, however, intentionally focused on Faribault's competitive advanta*ges. Dozens of data sources were consulted and considered in the process of preparing this report. The data selected for inclusion provides a broad overview of Faribault's economy, with a specific focus on its strengths.

To learn more about the economy, the Faribault EDA engaged University of Minnesota Extension's Community Economics team. The Faribault EDA charged Extension with addressing the following questions related to Faribault's economy.

- Current economy:
    - What are the current strengths of Faribault's economy? What industries have historically brought growth to the city?
    - Which of these industries are primed for future growth?
- Future economy:
    - What new industries fit with the current profile of the city—its demographics, its workforce, and its current industry mix? What are the regional strengths that Faribault might tap into?
    - Of the potential new industries to recruit, which will pay a living wage?

Extension crafted a four-step process for addressing the Faribault EDA's needs.

1 In step one, Extension scanned relevant data resources related to the city of Faribault. In particular, Extension focused on data related to the economic climate, labor markets, commuting patterns, and demographics.

2 In step two, Extension assembled an expert panel to discuss preliminary findings from the data scan. On March 7, 2016, Extension brought together experts in the area of community and economic development, along with Faribault EDA members, to discuss the preliminary findings in a campus review meeting. At this meeting, Extension presented a draft of the information and analysis. Experts provided assistance in interpretation of the key findings from the data, suggestions for any additional data to obtain or share with the EDA, and key implications for Faribault.

3 In step three, Extension conducted a workshop with the Faribault EDA. On March 17, 2016 Extension presented the preliminary results, adjusted based on input from the expert panel, to the Faribault EDA. This was an interactive meeting where EDA members engaged in discussion about the data, asked questions, and started to form a narrative around what the data means for Faribault.

4 In step four, a written report was prepared. The report is based on the data collection and feedback from the EDA and expert panel.

NOTES ON THE DATA SOURCES

For a comprehensive view of Faribault's economy, Extension consulted multiple data sources. Each source has its own data collection methods. Variations in these methods can make direct comparison between sources difficult. The data sources together, however, can paint a picture of Faribault's economy.

Specifically, readers should be aware that the geography represented in each of the data sources can vary. Some data sources use city limits while others use the 55021 zip code. Still others use the Faribault-Northfield micropolitan statistical area.

Another complication of the Faribault data is the presence of the Minnesota Correctional Facility, as the data can skew certain statistics, such as median income. Where possible, Extension excluded the prison population (the institutionalized population) from the economic data. The prison population will be noted if included in the results.

Expert Panelists:

- Michael Darger, Community Economics Specialist, Extension. Area of expertise: business retention and expansion.
- Liz Davis, Professor, Applied Economics. Area of expertise: labor force development.
- Laura Kalambokidis, Professor and State Economist, Applied Economics. Area of expertise: Minnesota state economy.
- Deanna Kuennen, Community and Economic Development Director, City of Faribault.
- Lee Munich, Research Fellow, Humphrey School and Harvard Cluster Mapping project. Areas of expertise: economic development and cluster mapping.
- Ward Nefstead, Associate Professor and Extension Economist, Applied Economics. Area of expertise: entrepreneurship.
- Steve Underdahl, Faribault City Council and EDA, City of Faribault.

FARIBAULT'S COMMUTING PATTERNS

Communities can use commuting patterns to unpack the complex structure of a local economy. When considering an economy, communities can think both in terms of those who *live* in the community (What jobs, education, and skills they have? What are their wages and incomes?) and those who *work* in the community. The success of both groups is vital for the prosperity of a community. Understanding the needs of both groups can help guide economic development efforts.

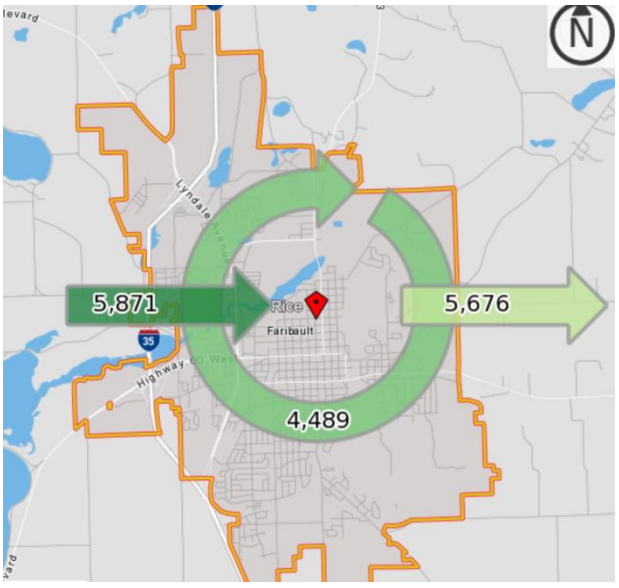
Faribault's commuting patterns arguably provide deep insight into Faribault's economic and community development efforts. Interestingly, the city's commuting patterns are fairly balanced (Map 1).

In 2015, on average, approximately 4,500 people both lived and worked within Faribault's city limits. These are key constituents for economic development efforts. People living and working in the city benefit both from increased job opportunities, improved infrastructure, and a larger tax base. They are also a significant part of the employment pool for new and expanding businesses.

Meanwhile, nearly 5,900 people commuted to Faribault on a daily basis. These are the workers Faribault businesses rely on. A pool of qualified workers willing to commute into the city is critical to business' success. They also represent an opportunity for local retailers to capture their spending while in town and be viewed as potential new residents.

Nearly 5,700 people commuted out of Faribault daily in 2015. These are Faribault residents who use city services and resources, such as parks, recreation, and utilities. They also represent a potential workforce for businesses looking to locate or expand in Faribault. It is important to know the skills and education of these workers. This information can be used to recruit new employers to the city, and in turn, this will keep residents working in town and grow economic development efforts.

Map 1: Faribault, Minnesota Commuting Patterns, 2015



Source: On the Map, United States Census

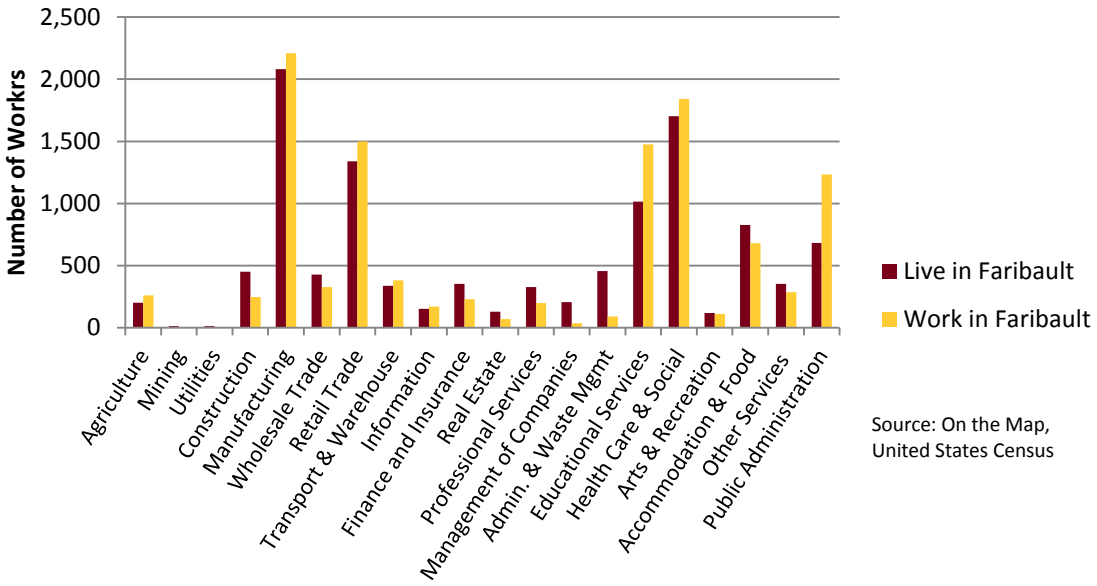
Note: Arrows do not represent commuting directions.

Closer examination of On the Map data reveals minimal differences (in industries of employment, demographics, and wages) between workers commuting to Faribault versus those that commute out of the city. In part, this is due to the limitations of the data. For example, On the Map breaks out the

number of commuters by wage level. However, it only has three wage level options, and the options do not provide enough information to determine if out-commuters might be earning a higher wage than in-commuters (or vice versa). Exploring the differences between in-commuters and out-commuters is an area the EDA might wish to investigate further.

Faribault, as the county seat and home to several state government operations, has more people commuting in to work jobs in public administration than commuting out (Chart 1). On the other hand, the city has more people commuting out for educational services jobs than commuting in. There are multiple educational systems within commuting distance of Faribault, including private colleges, a state college, community and technical schools, and K-12 districts. This may explain the out-commuting differential. However, Faribault itself is home to a private 6-12 grade school, a community and technical college, and a public K-12 district.

Chart 1: Industries of Faribault Workers and Residents, 2015



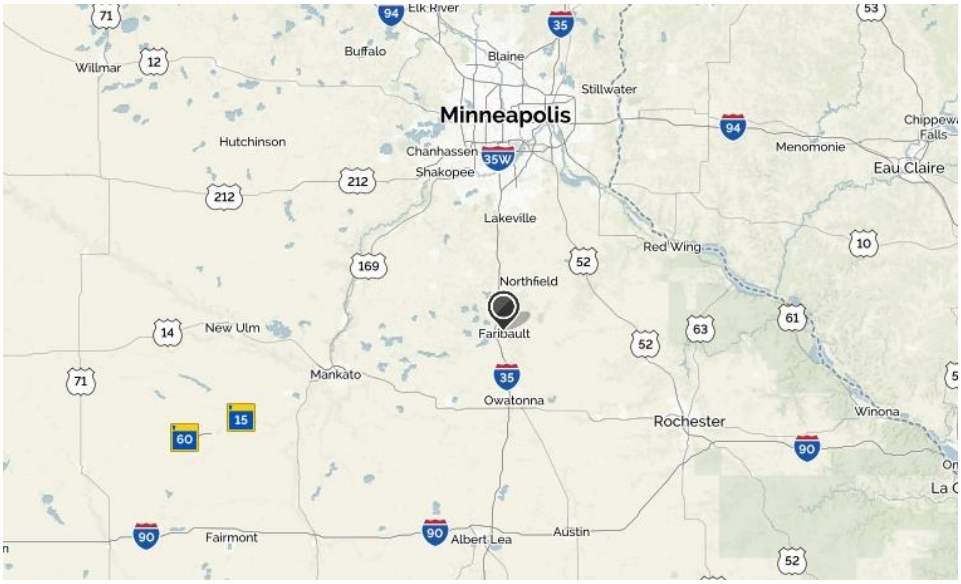
Source: On the Map, United States Census

One underlying reason for Faribault's relatively balanced commuting patterns may be its location. Faribault is located directly off Interstate 35 in southern Minnesota. On average, 30,000 vehicles pass by Faribault on a daily basis on I-35.[1] Ease of access to Faribault is a benefit both for the workforce and businesses in terms of accessing their markets.

In addition to being located near a major interstate, Faribault is also a regional population center located near several other prosperous communities (Map 2). With a population of 23,000, Faribault is one of the largest cities in south central Minnesota. To its north lies Northfield (population of 20,000) and to the south lies Owatonna (population of 26,000). To the west is the Mankato metropolitan statistical area (MSA) with a population of 97,000 and to the east is the Rochester MSA with a population of 207,000. Location near other communities is advantageous for Faribault because it provides businesses with access to a large workforce and trade opportunities.

[1] Annual average daily traffic count for 2014 from Minnesota Department of Transportation.

Map 2: Map of Southern Minnesota, Centered on Faribault



This relative balance in commuting flows, however, complicates economic development efforts in Faribault. A community with a high level of in-commuting might focus economic and community development efforts on attracting these workers to live in the community. Conversely, a community with a high level of out-commuting might focus efforts on attracting businesses to the city. The balance in Faribault means the Faribault EDA will need to choose priorities based on the needs of the city.

FARIBAULT'S CURRENT ECONOMY

Communities may examine their economies from two aspects—the businesses that make up the economy and the workforce. Communities also look at the make-up of the current economy to understand their strengths (Who are the major players? What industries are growing?), their weaknesses (What industries are in decline? What industries are underrepresented?, and their opportunities (What industries, with a little support, could grow?).

In considering the current economy, examining jobs, the industry mix, wage rates, and industry performance is a good starting place.

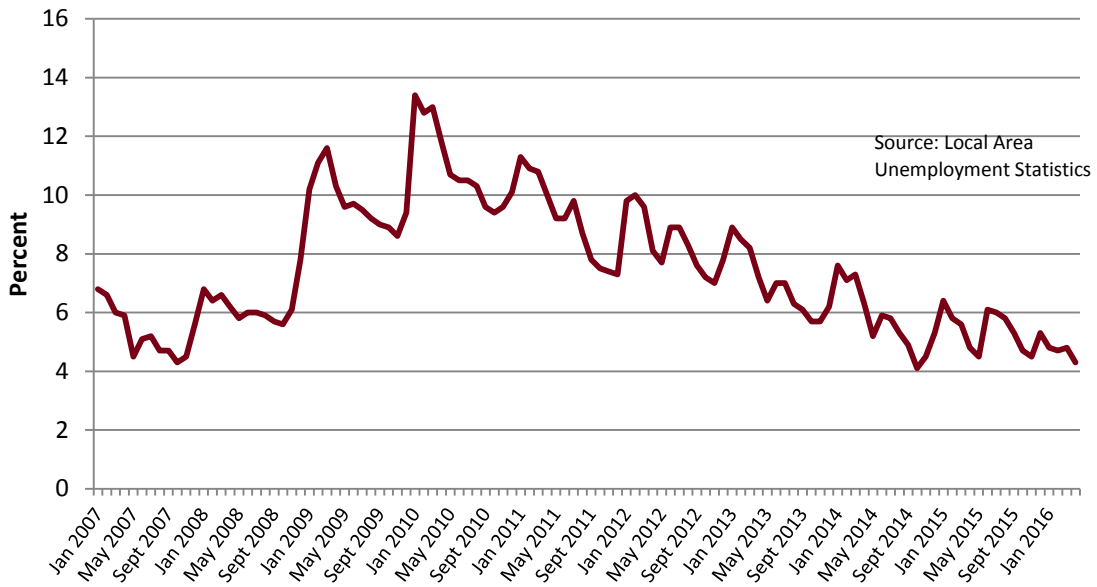
Jobs in Faribault

Faribault's population as of the 2010 United States Census was 23,352. Nearly 11,400 Faribault residents are of working age (defined as those between 19 and 64 years old and non-institutionalized). Of those, 10,200 are working. Unemployment rates are low among Faribault residents (Chart 2).

In terms of economic development efforts, the Faribault EDA does not necessarily need to seek job opportunities for current residents. However, low unemployment rates do make it difficult for new or expanding businesses to find workers for job openings. At the state level, labor markets are expected to remain tight. Employers are engaging in creative solutions to retain current employees (flexible work arrangements for those near retirement age, for example) and in recruiting new

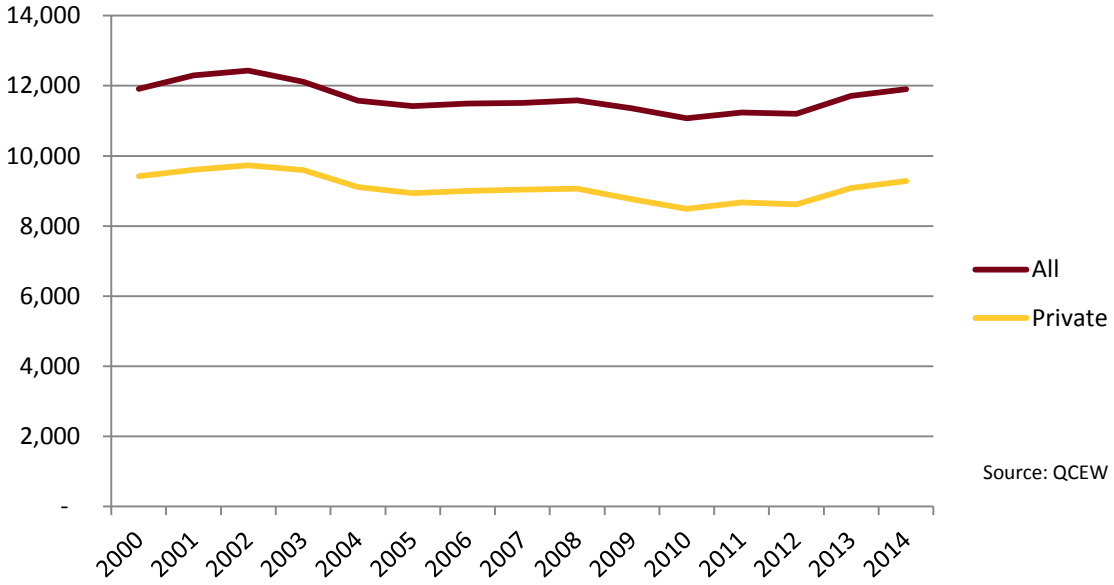
employees. Employers are also being required to think differently about the workforce of tomorrow and adjust accordingly.

Chart 2: Unemployment Rate, Faribault



While Faribault's residents are engaged in the workforce, growth in the number of jobs in Faribault has been slow (Chart 3). These are jobs filled by in-commuters and those who both live and work in the city. Faribault added jobs in the early 2000s but lost jobs between 2003 and 2005. The city also lost jobs during the Great Recession of 2009 to 2010, although not at rates experienced statewide. Faribault has been adding jobs since 2012, which is consistent with recovery from the Great Recession. Overall, the number of jobs in Faribault grew by 3% between 2000 and 2014.

Chart 3: Number of Jobs, Faribault, 2000-2014



In comparison, cities of similar size within the region added jobs at a faster rate (Table 1). The number of jobs in Owatonna, a similarly sized community 16 miles to the south of Faribault, grew by 9% during the same time period. Both communities had similar population growth rates.

Table 1: Change in Number of Jobs and Population, 2001-2015

City	Percent Change in Jobs	2015 Population	Percent Change in Population
Faribault	**3%**	**23,000**	**38%**
Owatonna	9%	25,600	42%
Northfield	7%	18,900	32%
Austin	1%	24,700	2%
Winona	7%	27,600	87%
Lakeville	20%	76,300	32%
Mankato MSA	9%	98,900	14%
Rochester MSA	7%	214,400	14%
Minnesota	6%	3.5 million	10%

Source: EMSI

This relatively slow job growth rate should be of concern to the Faribault EDA and a source of further discussion. Recent job performance has been strong in Faribault. While the number of jobs in Minnesota fell by 4% during the Great Recession (between 2009 and 2010), the number of jobs in Faribault fell by only 2.5%. Between 2012 and 2014, the number of jobs in Faribault grew by 6.3 percent.

The Faribault EDA may gain insight into its economy by understanding the drivers of job loss in the early 2000s and the slow growth through the mid-2000s. One way to do this is to closely examine the changes that occurred; for example, which industries lost jobs? This, coupled with local knowledge, can help explain the decline. It may be Faribault lost a major employer in this time period. A loss of a major employer has different implications than a gradual decline over time. The decline could also indicate that employers are adding automation and technology to offset the statewide labor force shortage.

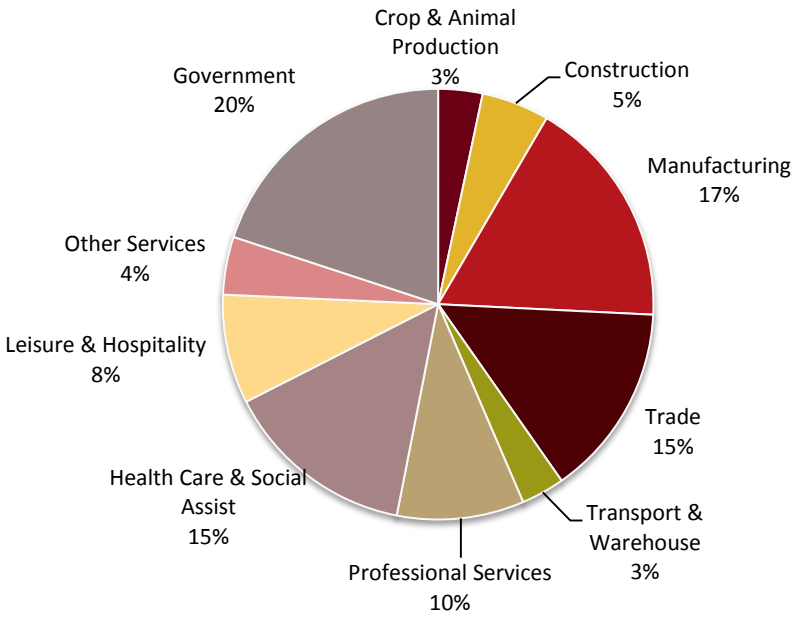
Faribault's Industries

Faribault is a manufacturing-based economy. Manufacturing is the largest private industry in the city, employing 17% of all people working in Faribault (Chart 4). Faribault has twice as many manufacturing jobs than the national average and has a higher concentration of employees in manufacturing compared to the state.

The government sector employs 20% of all workers. Faribault is home to a Minnesota State Correctional Facility, the State Academy of the Blind, and the State Academy for the Deaf. Once adjusted for the extra state employment, Faribault has approximately the same percent of its jobs in the public sector as an average city in Minnesota.

Both the trade industries (retail and wholesale trade) and the health care and social assistance industries employ 15% of workers in Faribault.

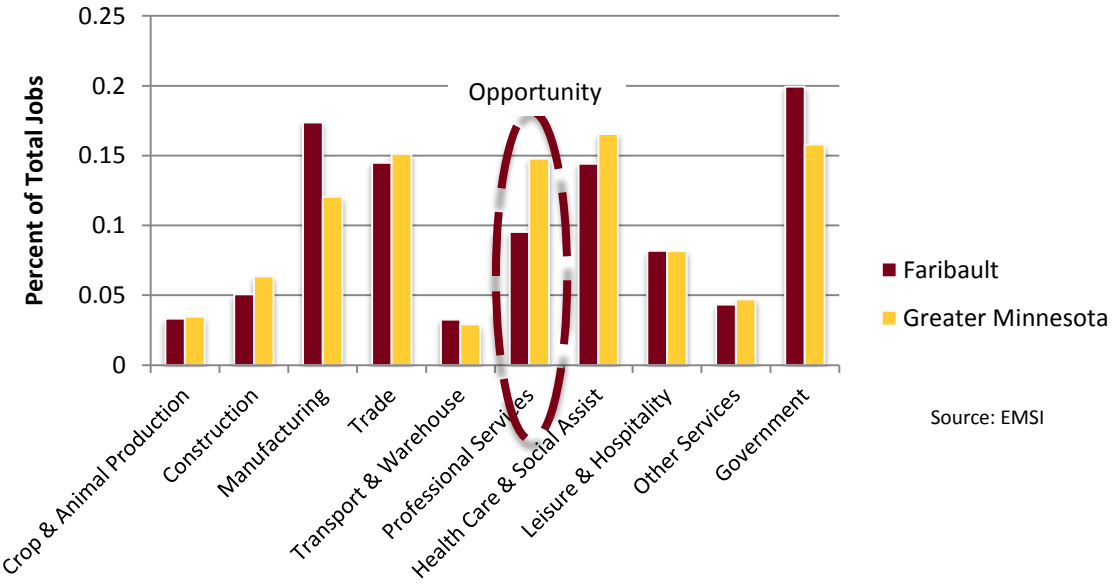
Chart 4: Jobs by Industry, Faribault, 2015



Source: EMSI

Compared to other communities in Minnesota, Faribault has a higher share of employment in the manufacturing and government industries (Chart 5). In return, Faribault has a lower share of employment in the professional services industry. To diversify the economy, the Faribault EDA might want to consider options for increasing the number of jobs in this industry.

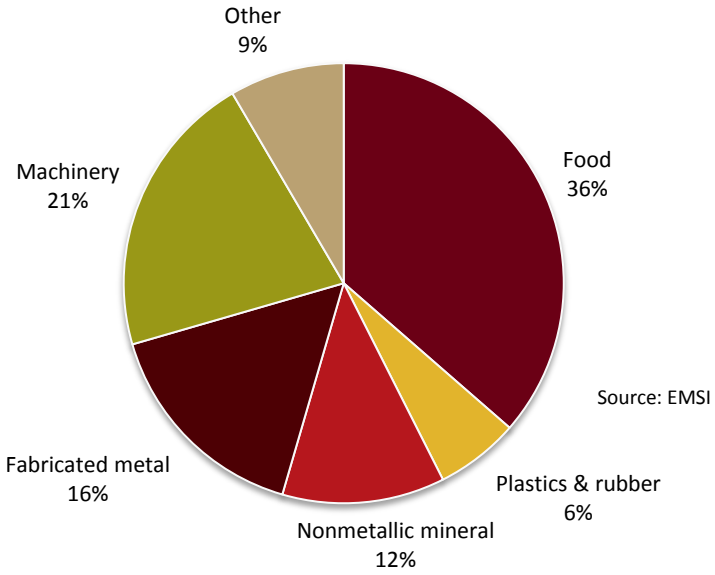
Chart 5: Jobs by Industry, 2015



Source: EMSI

Within manufacturing, four sectors account for 85% of the jobs (Chart 6). Food manufacturers, including companies like Faribault Foods and Jennie-O Turkey Store, employ 36% of manufacturing workers. Machinery manufacturers, such as Daikin, K and G Manufacturing, and Humphrey Manlift employ 21%. Fabricated metal manufacturers include MRG Tool and Die and Karl's Machine Shop. Nonmetallic mineral manufactures include companies such as Sage Electrochromics.

Chart 6: Jobs by Manufacturing Sector, Faribault, 2014



Faribault's manufacturing location quotient (LQ) is 2.2. This indicates Faribault has twice as many manufacturing jobs as the average city. Not only do manufacturing businesses employ a major share of Faribault's employees, they do so at rates higher than at the national level. There is a concentration of manufacturing jobs in the city.

The manufacturing sector with the highest LQ (10. 6) in Faribault is textile product mills. Faribault is home to the Faribault Woolen Mill, and while not a major employer in the city, it is an important one and has a higher number of employees than the national average.

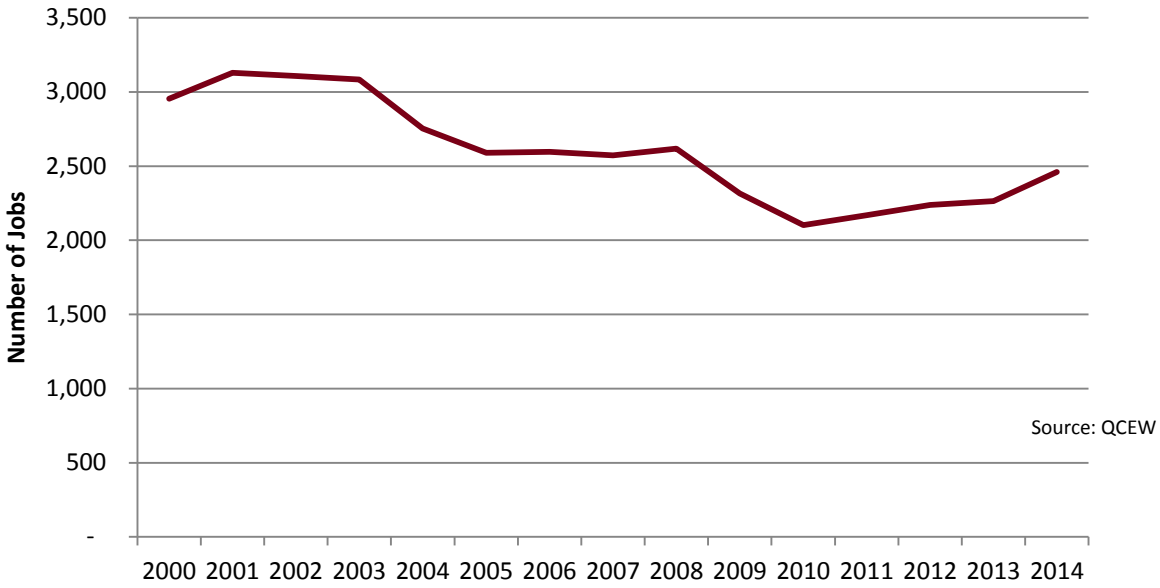
Nonmetallic mineral manufacturing has a LQ of 8.2, food manufacturing a LQ of 6.0, machinery manufacturing a LQ of 5.6, and fabricated metal manufacturing an LQ of 2.9.

Location Quotient (LQ): A location quotient measures the concentration of jobs in Faribault, as compared to the national average. A LQ of 1 indicates the city has approximately the same percent of its employment in the industry as nationally. A LQ of more than 1 indicates a higher concentration of jobs. LQ's indicate a relative strength.

Manufacturing employment declined gradually in Faribault between 2003 and 2008 (Chart 7). A shift to automation in the manufacturing industry may explain some of this decline. The Great Recession also affected manufacturing across the U.S., and Faribault mirrored those trends, which will be discussed later in this report. Manufacturing

employment in Faribault has been increasing since 2010 but is not yet at the levels of the early 2000s.

Chart 7: Manufacturing Employment Over Time, Faribault MN



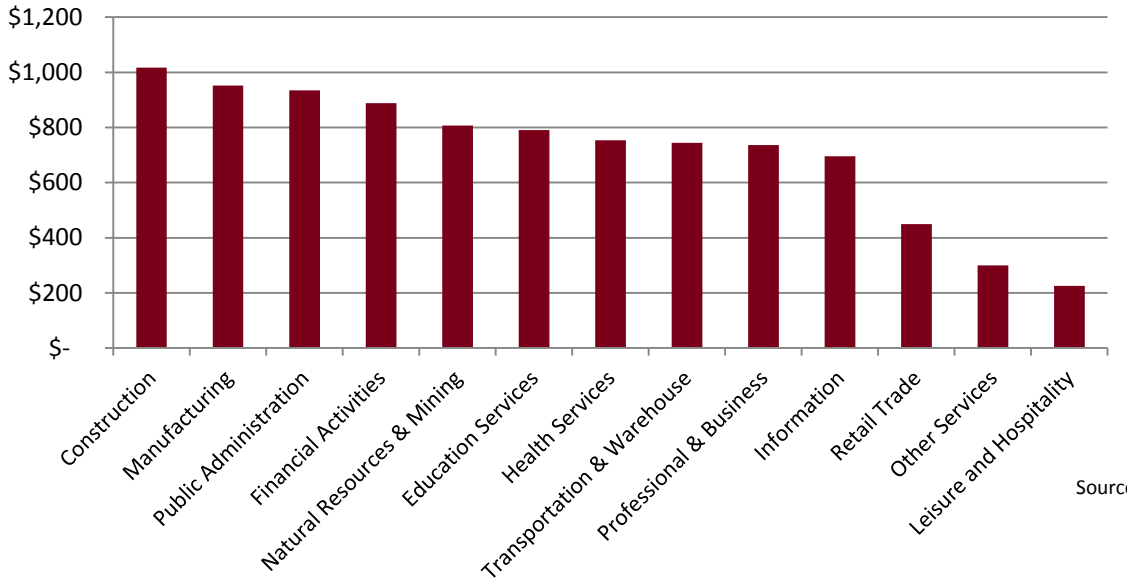
A strong manufacturing sector has historically been a strength for Faribault, as it provides jobs with relatively high wages. However, it also leaves Faribault vulnerable to declines in the manufacturing sector. The EDA may wish to consider options for continuing to diversify the economy.

Wages in Faribault

Faribault's 2014 average weekly wage across all industries was $756. This translates into $19 per hour or $39,000 per year. Wages were highest in the construction ($1,017), manufacturing ($952), and public administration ($934) industries (Chart 8).[2] Wage calculations include businesses that report being located in Faribault and are covered by the unemployment insurance program. The average weekly wage is calculated by taking total wages reported and dividing by average annual employment. This figure is then divided by 52 weeks.

[2] Average weekly wages are affected by the ratio of full-time to part-time workers and by the number of people with high wages and low wages within a particular industry. Bonuses, stock options, tips, and some benefits (employer contributions to tax-deferred compensation plans) are included in wages.

Chart 8: Average Weekly Wage by Industry, Faribault 2014

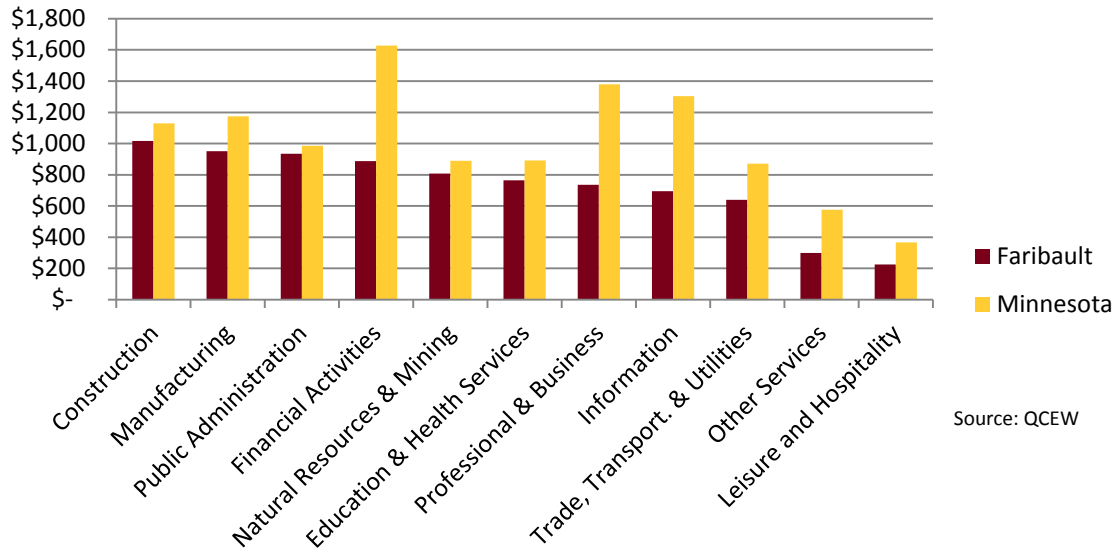


Source: QCEW

Minnesota's average weekly wage across all industries was $992. While below the state average, wage growth rates in Faribault exceeded the state growth rate between 2000 and 2014. After adjusting for inflation, Faribault's wages grew by 7.2% compared to 6% in Minnesota.

Faribault's wages are fairly close to Minnesota's in the construction, manufacturing, public administration, natural resources and mining, and health care and social assistance industries (Chart 9). Larger wage gaps exist in the financial activities (definition in appendix), professional and business services, and information industries. This wage gap may be a challenge when trying to grow these industry sectors and recruit employees.

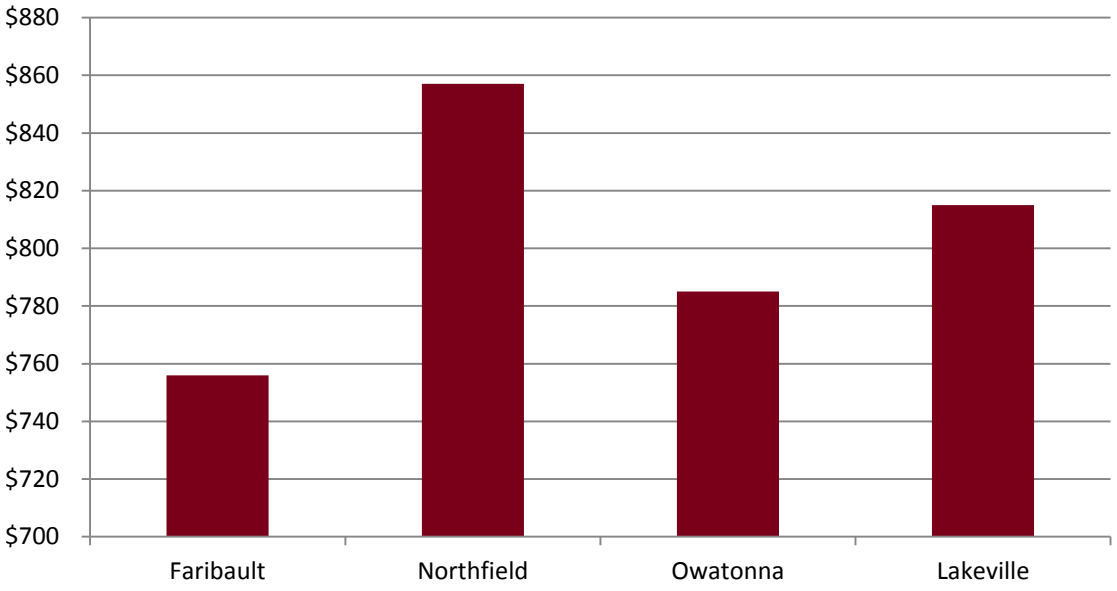
Chart 9: Average Weekly Wage by Industry, 2014
Sorted by Faribault



Source: QCEW

Faribault's average wages are also lower than several comparison cities (Chart 10). The cities were selected due to their size and/or location near Faribault.

Chart 10: Average Weekly Wages, All Industries, Comparison Cities, 2014



Source: QCEW

Lower than relative wages can be appealing for businesses looking to locate or expand in the city. However, lower wages can also put stress on households in the city and make recruiting employees more difficult for businesses if higher wages can be earned in nearby cities.

Growth and Decline Industries

While manufacturing is a clear strength in Faribault's economy, the number of jobs in the industry fell by 798 between 2001 and 2015 (Table 2). While this may appear to be a startling number, it is consistent with conditions at the national level during the time period. Had Faribault lost manufacturing jobs at the same rate as occurred in manufacturing at the national level, the city should have recorded 1,011 lost jobs (industrial mix in Table 2). Compared to the nation, Faribault's manufacturing industry performed better.

Table 2: Job Change and Shift-Share Analysis, Faribault

Sector	Change 2001-2015	National Growth	Industrial Mix	Competitive Share	2014 Average Weekly Wage
Top Job Gain Industries					
Health care & social	692	94	405	192	$754
Crop & animal production	220	17	-20	223	$807
Transportation & warehousing	192	19	3	170	$639
Top Job Loss Industries					
Manufacturing	-798	238	-1,011	-25	$952
Construction	-79	58	-95	-42	$1,017
Management of companies	-68	8	21	-96	$1,300

Source: EMSI

The fastest growing industries in Faribault between 2001 and 2015 were health care and social assistance, crop and animal production, and transportation and warehousing. All three industries posted strong competitive effects. A positive competitive effect indicates that the city's industry outperformed national and industry trends (see appendix one for more on interpreting shift-share).

Growth in health care and social assistance occurred in one of the larger industries. However, growth in the sector came primarily from the nursing and residential care facilities sub-sector, which

Shift-Share Analysis: Shift-share is a useful method for determining the drivers of growth or decline in an industry. Using national averages, the analysis determines how much of the change was a result of overall job change (national growth) and how much of the change was due to change in the industry at the national level (industrial mix). The rest of the change is the competitive share and is considered to be the result of conditions at the local level. In general, a positive competitive effect indicates the industry in the community has outperformed national and industry trends.

has relatively lower paying wages. Wages in the sub-sector ($430 per week) are on the lower end for health care and also compared to wages across all industries. This is one factor contributing to the lower than average wages in Faribault, as compared to other cities.

Both losses in the manufacturing and construction industries were primarily a reflection of the conditions in the industries themselves, as evidence by large losses in the industry mix. The Great Recession hit both industries hard. While troubling, Faribault's manufacturing and construction losses follow a national pattern. Losses reflecting local conditions (the competitive share) were relatively small.

Losses in the management of companies industry, however, are potentially worrisome for Faribault (Table 2). Based on national and industry trends, Faribault should have added management of company jobs. The management of companies industry is comprised of establishments that administer, oversee, and manage establishments of the company and normally undertake strategic and organizational planning roles. Faribault businesses in this industry are primary holding companies, particularly real estate holding companies. Losses are concerning because these tend to be high paying jobs.

Another concern for the Faribault EDA is wages. Industries adding jobs have relatively lower wages than the industries losing jobs. If this trend continues, it could lead to an overall lowering of the average wage in the city. This fact further supports the need to recruit and retain employers that pay higher wages.

Industry Clusters

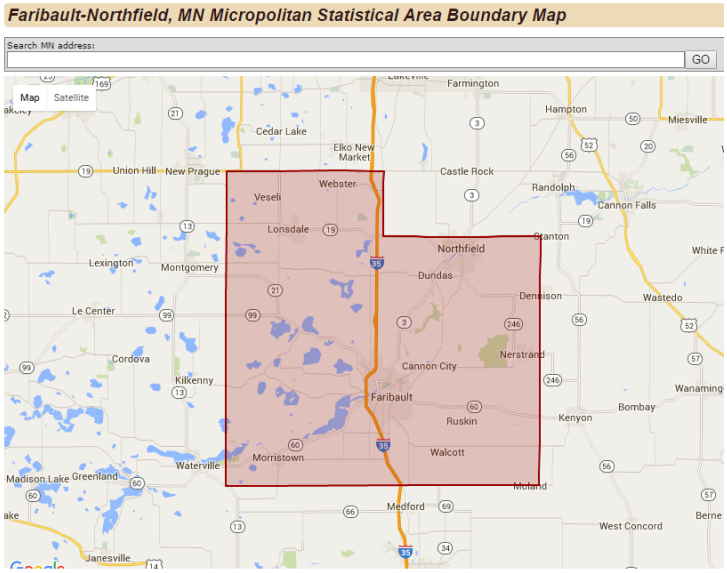
Industry Cluster: Related industries linked together by a common bond, such as a market, technology, or product. Identifying clusters can help communities understand the synergies in their economy.

An examination of industries provides insight into Faribault's economy. Understanding how those industries connect together allows for even deeper understanding. Harvard's Cluster Mapping project[3] is a tool designed to identify connections. Cluster mapping organizes related industry sectors together to identify a cluster. One well-known cluster is the automotive cluster in Detroit. Of course, the "big three" automotive companies are located there, creating an automobile manufacturing sector. There are many other companies that produce related goods and services but are not in the automobile manufacturing sector, such as seat upholstery manufacturing or automobile engineering firms. However, they are still part of the automotive cluster.

Harvard University, in collaboration with the U.S. Economic Development Administration, developed a tool to identify clusters at the regional level in Minnesota. The cluster mapping project identified clusters for the Faribault-Northfield micropolitan statistical area (Map 3). Clusters are classified as traded or local clusters. Traded clusters are those in which most of the companies are trading their goods and services outside of the region. Manufacturers are good examples of traded clusters. Local clusters, on the other hand, are those that primarily market their goods or services within the local area. Grocery stores are good examples of local clusters.

[3] http://www.clustermapping.us/

Map 3: Faribault-Northfield Micropolitan Statistical Area



Economic developers use cluster analysis (such as Harvard's tool) in a variety of ways. For example, a major employer in one region of the United States announced it was closing. Cluster analysis identified related industries that might hire the skilled employees. Another example is when economic developers used the tool to identify South Carolina's competitive strengths and to develop benchmarks for measuring the state's performance in those clusters relative to other states.

The Faribault EDA can use the industry clusters in a similar fashion. First, industry clusters can show historic strengths—in which clusters does the region have a significant number of employees? Which industries are strong in Faribault compared to the nation? These are industries the EDA will want to consider supporting for continued growth and development. The established clusters can also point to opportunities for development of ancillary or support businesses. What other businesses would fit in the cluster that might compliment current ones? The cluster analysis can also identify developing clusters. These are clusters that may not yet represent a significant share of employment, as compared to the nation, but they are growing. These particular clusters can point to emerging industries that might warrant support from the EDA.

> ***Traded cluster:*** *Primarily serve markets in other regions. Tend to be concentrated in areas that offer a competitive advantage. Most manufacturing businesses are in the traded cluster.*

Traded Clusters

Harvard's Cluster Mapping Project identifies nine traded clusters in the Faribault-Northfield area (Chart 11). A larger bubble in Chart 11 indicates a higher number of jobs within the cluster. In terms of jobs, the biggest clusters in the region are education (3,800 jobs), food processing (1,290 jobs), and production technology (1,060 jobs).

The education cluster includes the two private colleges located in Northfield. It also includes jobs in Faribault at the State Academies for the Blind and Deaf, at Shattuck-St. Mary's private 6-12 school, and at South Central College.

Food processing, as mentioned earlier, includes manufacturing firms such as Faribault Foods and Jennie-O Turkey Store, which are both in Faribault. Also included is MOM (Post), a breakfast cereal manufacturer located in Northfield.

Production technology and heavy machinery manufacturing is another major cluster. Included in this cluster are companies in the industrial machinery manufacturing, agricultural and construction machinery manufacturing, and commercial and service industry machinery manufacturing industries. Specific companies in Faribault include Daikin, K and G Manufacturing, and Humphrey Manlift, among others.

Chart 11: Harvard Cluster Mapping Project Cluster Portfolio for Faribault-Northfield Micropolitan Statistical Area

Source: Harvard Cluster Mapping Project

The downstream metals cluster employs 360 people. This cluster includes industries that produce metal products, fabricated metal, and metal containers. Businesses in Faribault in the cluster include MRG Tool and Die, and Karls Machine Shop.

Harvard's Cluster Mapping Tool also indicates how industries are growing and changing, helping to further identify regional strengths. Chart 12 shows Faribault-Northfield region clusters that 1) have a relatively high share of the national employment and 2) have been growing in their share of national employment. The size and color of the dot indicate how the cluster has been growing.

The education and knowledge creation cluster added jobs between 1998 and 2013 (thus the dot is green). This dot is large, indicating a high number of jobs in the cluster. In addition, the cluster is located to the far right of the chart—meaning the Faribault-Northfield area has more employment in the region compared to the nation and that the cluster has been growing in its share of national employment.

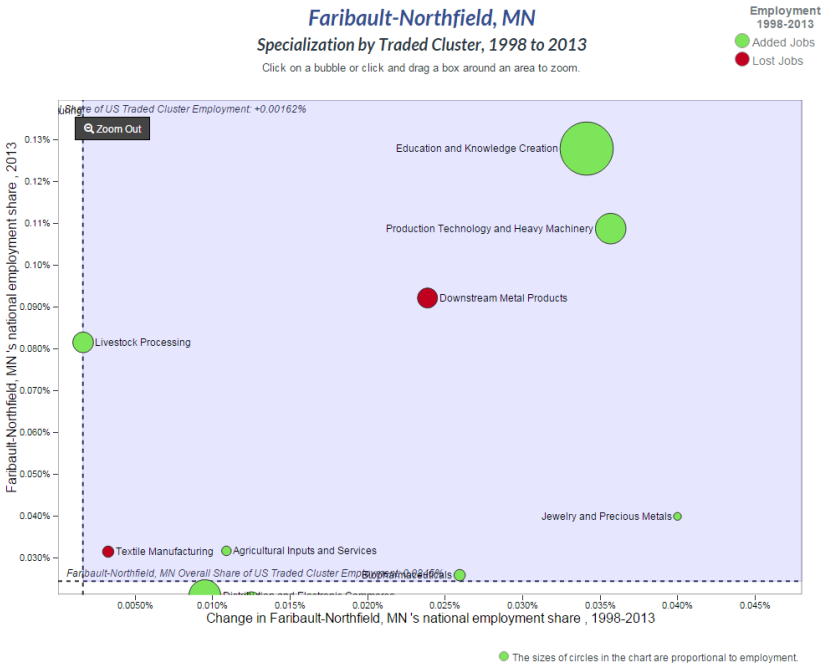
The production technology cluster is similar to the education and knowledge creation cluster, although the overall number of employees in the cluster is smaller. This is an established industry

cluster, and the Faribault EDA may want to explore options to support its continued growth. This is also a cluster in which the EDA could look for ancillary or support businesses that might locate in Faribault due to a competitive advantage of having multiple businesses in the region.

The downstream metal products cluster lost jobs between 1998 and 2013. Despite these losses, the industry increased its share of national employment. This indicates Faribault has a competitive edge in the industry. The Faribault EDA may want to learn more about this cluster—what's driving the growth? What can be done to support the industry? There may be opportunities to continue to develop the industry in Faribault.

Chart 12 identifies industries with a high and growing share of national employment, or Faribault-Northfield's current strengths.

Chart 12: Harvard Cluster Mapping Project Results for Faribault-Northfield – Traded Industries with a High and Growing Share of National Employment



Source: Harvard Cluster Mapping Project

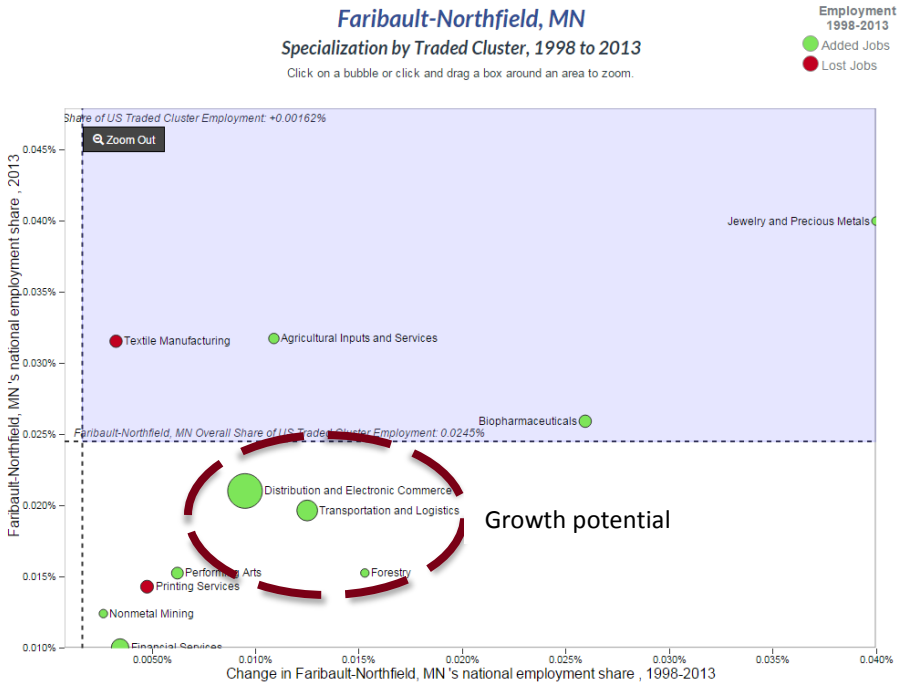
Chart 13 shows industries with a relatively low share of national employment but that have grown in their share over time. This indicates the city's potential future strengths, and the Faribault EDA should be aware of these industries and seek ways to support them for continued growth. This cluster might also contain businesses that could be successfully recruited to Faribault.

In the chart, the industries below the line (in the white area) are the ones with a relatively low share of national employment but have been growing. The industries above the line (in the blue area) are those with a relatively higher share of national employment that have also been growing. The blue area in Chart 13 is the lower half of the blue area in Chart 12.

The chart identifies two main industries with growth potential—distribution and electronic commerce and transportation and logistics. The distribution and electronic commerce cluster includes subsectors, such as wholesale of farm products and supplies, warehousing and storage, and wholesale of electric and electronical goods. This is a broad category including everything from KGP Telecommunications to self-storage units to farms marketing their livestock in wholesale markets.

Faribault's transportation and logistics cluster is primarily trucking companies. However, it also includes ground transportation support activities (like Faribault Transportation Companies) and air transportation (the Faribault airport).

Chart 13: Harvard Cluster Mapping Results for Faribault-Northfield – Traded Industries with a Low but Growing Share of National Employment



Source: Harvard Cluster Mapping Project

Local Clusters

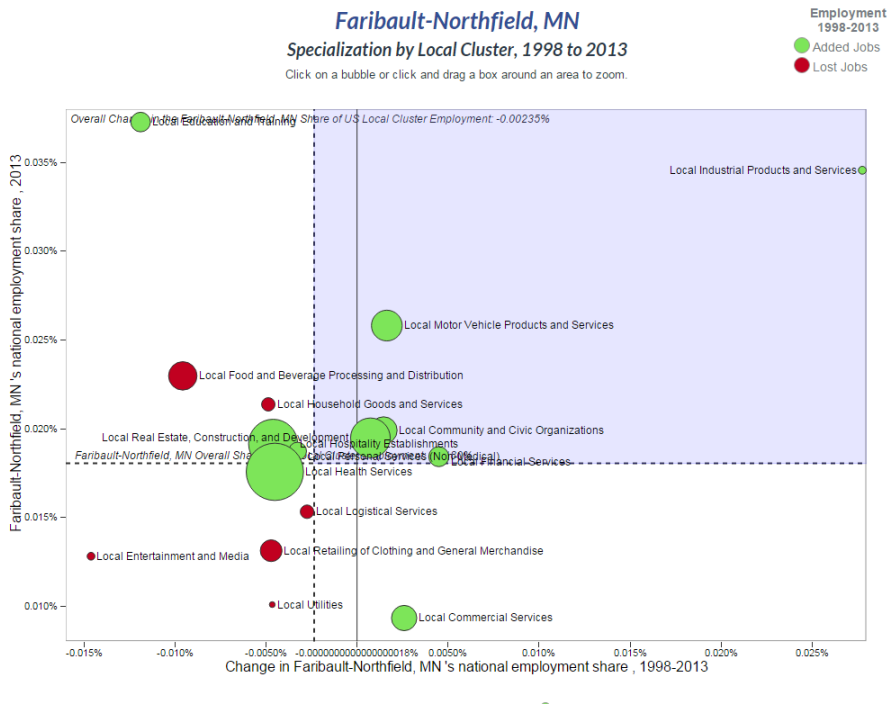
In addition to traded clusters, the Harvard Cluster Mapping project also recognizes local industry clusters (Chart 14). The Faribault-Northfield area has a strong cluster around local industrial products and services. Two main types of businesses are in this cluster—machine shops and recyclable materials wholesalers.

> ***Local cluster:*** *Primarily serves local markets and are located, to varying degrees, in every market. Local clusters include businesses such as grocery stores.*

There is an intriguing strength around local real estate, construction, and development. Faribault has a significant number of specialty contractor employees—specifically plumbing, heating, and air conditioning contractors and electrical contractors. Also included in local real estate are general contractors, construction material retailing, and real estate services. It is possible some of this industry may be developing in Faribault due to the presence of the large air conditioning and refrigeration company, Daikin. The Faribault EDA may want to have conversations with local

construction companies to determine if this is indeed happening. It could be one area to target for potential development.

Chart 14: Harvard Cluster Mapping Project Results for Faribault-Northfield – Local Industries with a High and Growing Share of National Employment



Source: Harvard Cluster Mapping Project

Discussions about cluster mapping encourage conversations about building on assets and strengths. When a city or region is strong in an industry, it gives rise to the opportunity to build up ancillary and support industries. For example, with many strengths in machining and machinery manufacturing, the Faribault EDA might consider businesses complimenting those strengths. For example, an engineering firm that designs machines or a CAD/CAM company may want to locate in a city with several potential clients.

If a community is not strong in an industry cluster, particularly a traded cluster, it often indicates a lack of competitive advantage. Competitive advantage can arise from an industry's long history in an area. It can arise from a supply advantage (food manufacturing in southern Minnesota, for example) or from a production advantage (flour milling on the Mississippi River, for instance). Recruiting companies to a region that does not have a competitive advantage can be done, but it's often easier with companies that do see an advantage.

WORKFORCE IN FARIBAULT

In addition to understanding the current economy, understanding the workforce in Faribault is also important, as these are the people businesses need to be successful. Workforce availability can and

does affect business location decisions. By and large, this section of the report focuses on the people currently living in Faribault.

Staffing Patterns

Workers in Faribault have certain skills and talents acquired via formal education and on-the-job training. Businesses looking to locate in Faribault may want employees with those skills and talents. Therefore, identifying current occupational skills can help identify which industries to target.

Major manufacturing occupations in Faribault include:

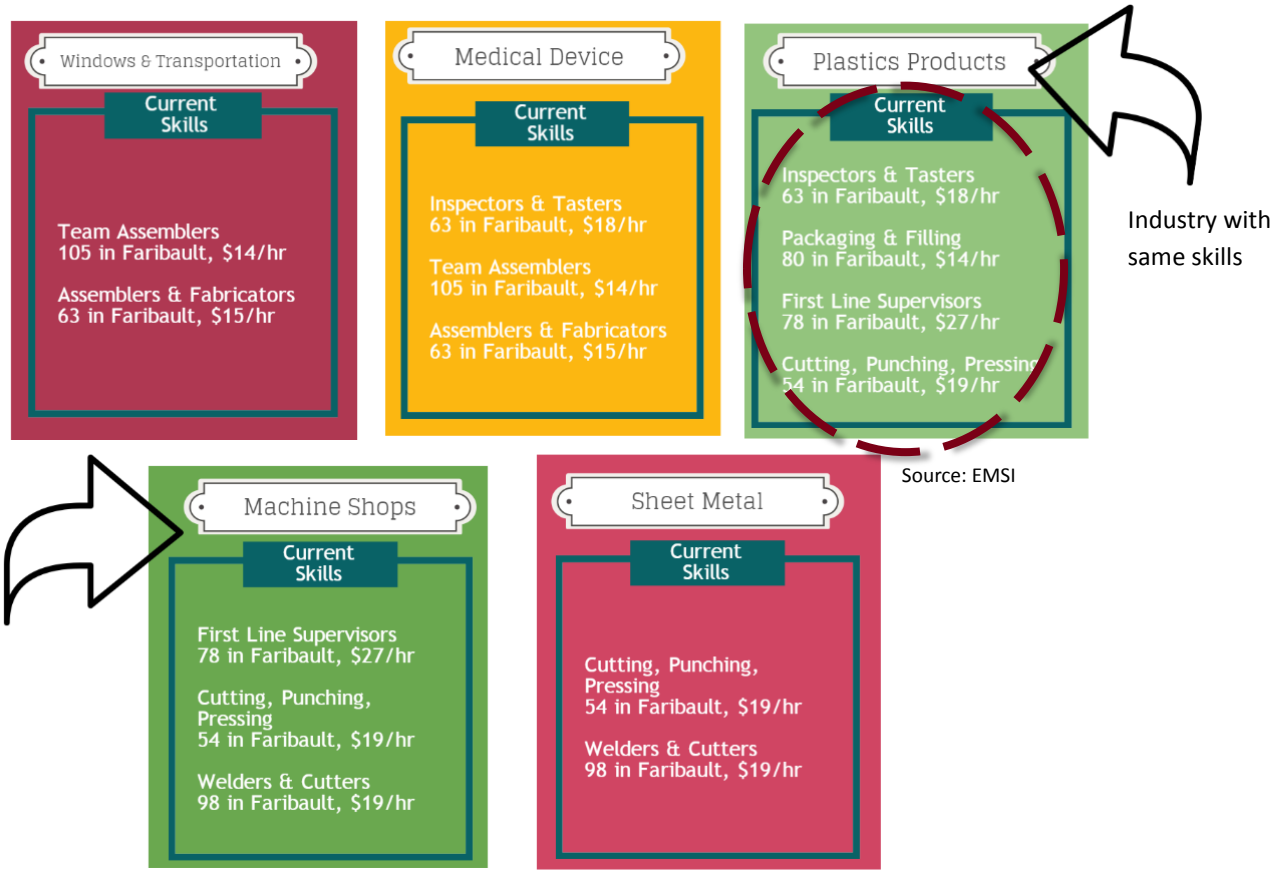
- Team assemblers
- Welders, cutters, solderers, and brazers
- Packaging and filling machine operators
- First-line supervisors
- Inspectors, testers, and sorters
- Assemblers and fabricators

These are jobs located in Faribault, so this section of the report looks at those working in Faribault (as opposed to those living in Faribault).

These occupations can be mapped to Minnesota manufacturing sectors that hire in the same type of occupations (Chart 15). Sectors using the same type of skills include wood window and door manufacturing, transportation equipment manufacturing, electromedical and electrotherapeutic apparatus manufacturing, surgical and medical instrument manufacturing, plastics product manufacturing, machine shops, and sheet metal.

Chart 15 shows major industries in Minnesota employing more than one set of occupations that are strong in Faribault. For example, plastic product manufacturers use inspectors and tasters, packers and fillers, and first line supervisors, as well as cutters, punchers, and pressers. Faribault has trained workers in these occupations; thus, the city may want to consider attracting a plastic product manufacturer. This is one opportunity for Faribault.

Chart 15: Current Worker Occupations in Faribault Matched With Industries Requiring the Same Skills



Source: EMSI

Note these skill sets are for people working in Faribault – regardless of where they live.

Chart 15 shows several industries that employ workers with similar skill sets. While plastic product manufacturers use the highest number of similar occupations, sheet metal, for example, also uses the same occupations. The examples above are select industries identified during this project. The Faribault EDA may want to explore other industries and skill sets as well.

Occupational data can also be used to help evaluate prospective businesses. South Central College conducted extensive interviews with businesses in Faribault during 2014 and 2015. They established a list of industry sectors with development potential in Faribault.

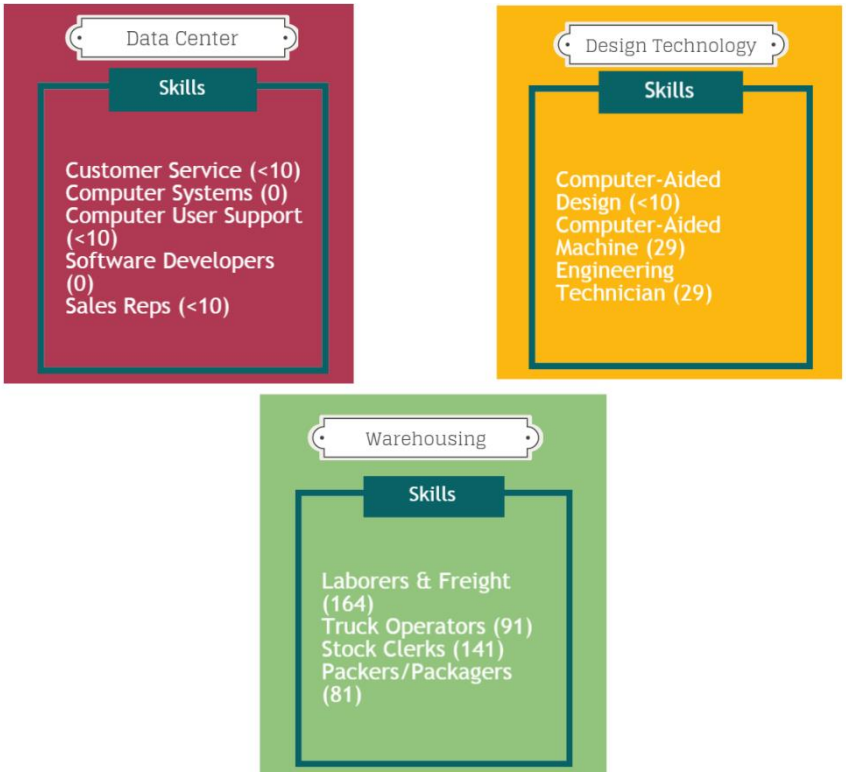
South Central College identified the following industries as having potential:

- Data center management
- Design technologies
- Green building/alternative energy
- Building automation/HVAC
- Supply chain management
- Welding and fabrication

Conversations with the Faribault EDA and an examination of the data indicate an interest in learning more about occupations needed for data centers, design technology, and warehousing. This section

of the report highlights the need for a match between industries that might locate in Faribault and subsequent occupational skills needed. As the Faribault EDA considers potential new industries in the area, it will likely want to look at the required occupational skills and their supply in the region.

Chart 16: Required Worker Occupations, Potential Industries in Faribault



Source: EMSI

In examining occupational data for Faribault, it is clear that Faribault has workers with the right education and training levels for some of its industries (warehousing and, to some degree, design technology). Chart 16 lists the industry, the top occupations in the industry, and the number of workers currently in Faribault (in parenthesis).

Data centers require customer service, computer systems operators, computer user support, software developers, and sales representatives. Faribault, as shown in the chart, currently has few workers in these occupations.

When considering whether or not to recruit a new business to Faribault, the EDA should consider if skilled and trained workers will be available or if area schools, colleges, and universities can provide training. The EDA would also need to market these training opportunities in the region.

Population

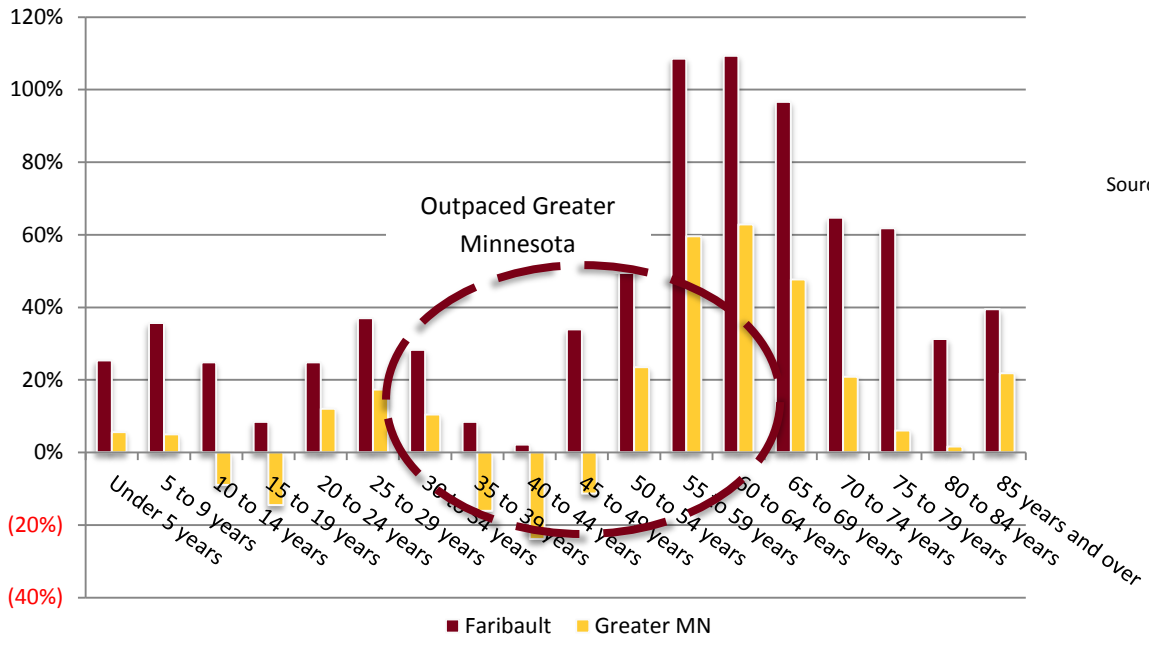
As mentioned, Faribault's population as of the 2010 United States Census was 23,352. Population growth has been moderate in Faribault. Total population increased by 33% between 2001 and 2014. As Table 1 indicates, this growth has been consistent with the neighboring communities of Owatonna and Northfield.

What is perhaps of more interest are changes in the demographics that occur with population change. Growth has been strongest in the population aged 55-69, which is consistent with demographic changes at the national level—the aging of the baby boomer population. This group will continue to age, and thus the number of retirees in Faribault will grow in the next 10 years. This could be a challenge for filling full-time positions, but it could also be an opportunity for employers who embrace flexible work arrangements to retain older workers.

When it comes to economic and community development, the Faribault EDA may want to concentrate on the primary working age population (those aged 19-64), as these will be the workers available to fill retirement positions and staff new job openings during the next 10 years.

Faribault has recorded only modest growth in the number of residents in the prime working age population, or those aged 30 to 50. Though modest, Faribault's growth rate in this subpopulation has outpaced growth in Greater Minnesota as a whole (Chart 17). Overall, the total number of Faribault residents in the prime working age population increased by 20% between 2001 and 2014.

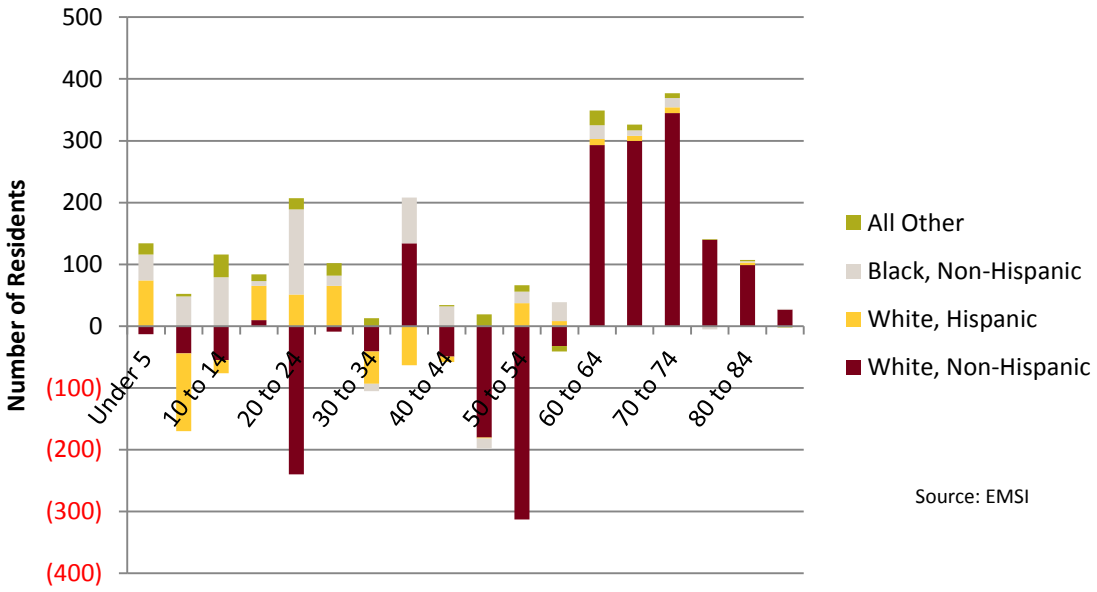
Chart 17: Percent Change in Age Category, 2001-2014



Source: EMSI

Growth in the White, Hispanic, and Black, non-Hispanic populations is project to primarily fuel growth in Faribault's working age population (Chart 18), and the face of Faribault workers will change. Faribault, for example, is projected to lose more than 200 White, non-Hispanic people in the 20 to 24 year old category. Meanwhile, the city is projected to add nearly 200 people of all other races/nationalities. The only category of working age population with projected growth of White, non-Hispanics is those aged 35-39.

Chart 18: Projected Population Change 2014-2020 by Race, Faribault



Source: EMSI

Changes in Faribault's workforce are consistent with those across Minnesota, particularly Greater Minnesota. Economists and workforce experts at the state level are already talking extensively about ways to engage the aging baby boomers in the workforce past traditional retirement ages. Businesses are examining creative ways to keep these employees satisfied and employed. Experts are also discussing efforts for engaging diverse populations in the workforce. The Faribault EDA might want to consider ways to support their local businesses in these efforts. This could involve offering workshops or discussion forums.

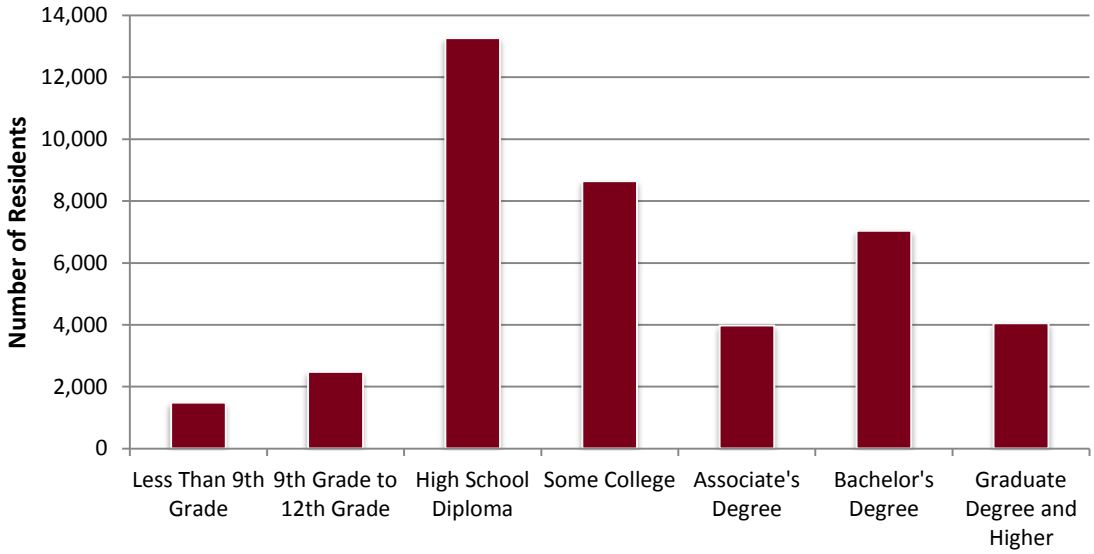
Education

Faribault has multiple educational assets in the community. In addition to the public K-12 schools, Faribault is home to Shattuck-St. Mary's, a private 6-12 grade institution. South Central College, a community and technical college in the Minnesota State College and University (MnSCU) system, also has a campus in Faribault. South Central College has been working collaboratively with local businesses to design customized training and create both credit and non-credit programs designed specifically to meet the needs of local employers. Finally, Faribault is home to the State Academies for the Blind and Deaf.

Current educational attainment by Faribault residents aligns closely with other Minnesota residents. Just over 13,000 residents have their highest educational degree as a high school diploma (Chart 19), and slightly more than 7,000 residents have a bachelor's degree.

Encouragingly for Faribault, growth in the number of workers with associates degrees, bachelor's degrees, or graduate degrees was strong between 2001 and 2014 and outpaced the other educational levels.

Chart 19: Educational Attainment, Faribault-Northfield MSA, 2014, Ages 25 Plus



Source: EMSI

Educational levels factor into community and economic development efforts in a variety of ways. Businesses looking to locate or expand in Faribault need employees with the necessary educational degrees and credentials to fill job openings. Education levels also affect wages, which factor into the quality of life for residents.

Income

Wages, education levels, and industries all affect income levels in Faribault. In 2014, the median household income for Faribault residents was $50,400.[4] Of the nearly 8,300 households in Faribault, around 2,000 households have incomes in the $50,000 to $75,000 range (Chart 20). An estimated 425 households have incomes in excess of $150,000 while approximately 800 households have incomes of less than $15,000.

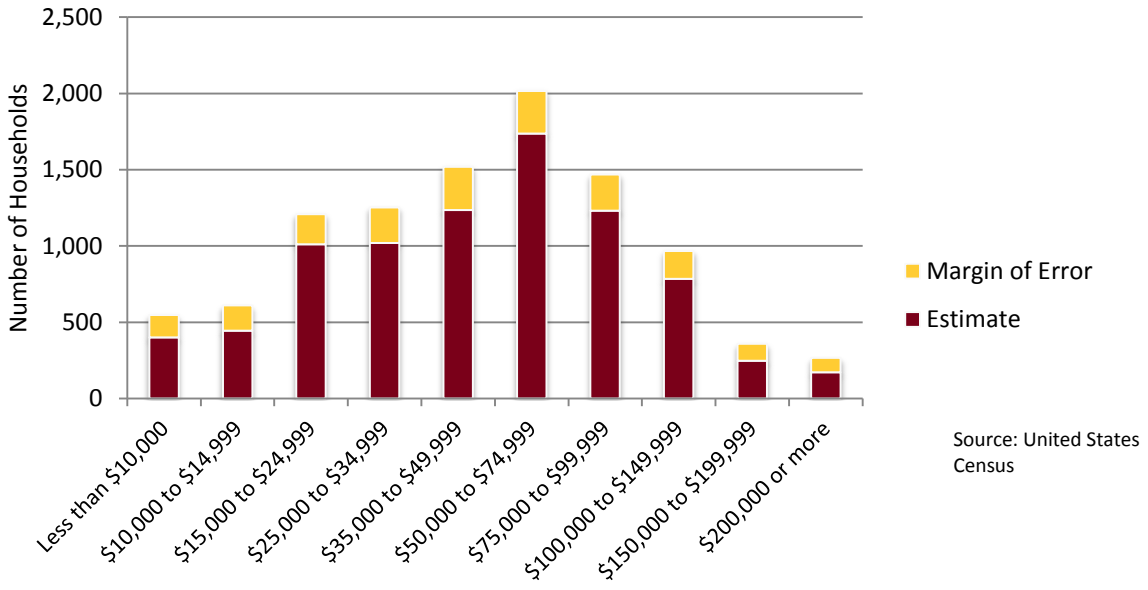
In Rice County, the estimated cost of living for a family with two workers (one full-time, one part-time) and one child is $49,130. This is just below the median income. Cost of living measures a living that meets basic needs for health and safety. It does not account for items such as vacations, entertainment, or savings.

In comparison, the cost of living for a Rice County household with two full-time workers and three children is $76,368, which is nearly $25,000 more than the median household income. Only 2,400 households have incomes above this rate.

Cost of living for a Rice County household with one full-time worker and two children is $57,508.

[4] Margin of error is plus or minus $4,400.

Chart 20: Income and Benefits, Faribault, 2014



Cost of living and incomes should be an important discussion point for the Faribault EDA, since the it likely wants to attract, retain, and grow businesses that provide Faribault residents with wages to support at least a basic level of living.

QUALITY OF LIFE AND BUSINESS CLIMATE

Although hard to measure in statistical terms, quality of life also factors into a community's desirability as a place to live, work, and locate a business. Conversations with the Faribault EDA reveal a pride in the small town feeling of Faribault—in the community's willingness to help businesses and residents succeed, in the tight knit community, and in support systems for businesses. The EDA further identified the rural landscape, along with a defined downtown, as assets.

Faribault has multiple resources for businesses. One, Faribault has a Department of Community and Economic Development, led by a paid staff person. Two, the city has the Faribault EDA. The EDA has broad community representation including industry, the chamber, the city council, and the planning commission. Three, Faribault has a Housing and Redevelopment Authority, a Park and Recreation Advisory Board, a Planning Commission, and a Tourism Commission.

Beyond the city, the EDA reports businesses can find support from the Faribault private business community, such as banking institutions. Faribault also has an active Chamber of Commerce.

CONCLUSIONS

During the process of preparing and writing this report, Extension facilitated in-depth conversations with the Faribault EDA. The Faribault EDA met for more than two hours in March to discuss the preliminary data. During that meeting, the EDA explored a wide variety of issues, at times challenged the data, and discussed ideas for addressing weaknesses uncovered by the analysis.

In June, Extension presented a draft report to the EDA. After hearing the primary themes of the report, the Faribault EDA reached six main conclusions. These conclusions were based on the data provided in this report and personal knowledge of Faribault.

1) Faribault's geographic location is an advantage. Faribault has two main geographic advantages. First, its location on Interstate 35, traversed by 30,000 vehicles per day, provides commuting opportunities for both Faribault residents and those working in Faribault. Access to markets provides a competitive business advantage, especially for manufacturers. Second, Faribault is a relatively large city in south central Minnesota and is located near other prosperous cities, giving businesses an opportunity to access a large workforce. Location near prosperous communities also increases business opportunities for marketing and trade.

2) Faribault has a stable and growing workforce. In comparison to most of Greater Minnesota, which is expected to see a decline in the prime working age population, Faribault is projected to grow. Growth in the working age population will be attractive to new businesses looking to locate in the area.

3) Faribault has a strong economic base. Overall, Faribault's economy has performed well. Between 2012 and 2014, the number of jobs in Faribault grew by 6.3%**.** Faribault wages, while comparatively lower, grew at a faster rate than Minnesota between 2001 and 2014. Faribault is a manufacturing-based economy, with twice the number of manufacturing jobs compared to the national average.

4) Faribault has a strong education and training system. In addition to the K-12 school system, including a private 6-12 school, Faribault is home to South Central College, a community and technical college. Beyond providing the standard post-secondary learning opportunities, South Central College has been proactive in addressing workforce needs in Faribault.

5) Faribault has a strong network of support for businesses. The Faribault EDA identified a strong support network for businesses in Faribault. In addition to the EDA, the city has a department, with paid staff, dedicated to community and economic development. The EDA reports businesses also find support from the private business community, including banking institutions and the Chamber of Commerce.

6) Faribault is committed to actively addressing challenges. In its recent Vision 2040 planning process, Faribault identified economic development as one of its top priorities. Faribault leaders are actively working on community and economic development issues. Faribault has citizens committed to actively taking leadership, and they are committed to building a bright future for the city.

The data included in this report provides a broad overview of Faribault's economy with a specific focus on its strengths—a strong, diverse manufacturing base, relatively strong growth in employment and wages, and in the face of workforce shortages, a growing population of working age adults.

APPENDIX 1: DATA SOURCES, DEFINITIONS, AND CLARIFICATIONS

Cost of Living

According to the Department of Employment and Economic Development's website, "Cost of living represents neither a poverty-level living nor a middle-class living but rather a living that meets basic needs for health and safety. The estimates exclude savings, vacations, entertainment, eating out, tobacco, and alcohol, even though many Minnesotans might assume these elements, taken in moderation, can be part of a normal healthy life" (http://mn.gov/deed/data/data-tools/col/method-col.jsp).

Cost of living estimates rely on some assumptions and definitions. The following explain these assumptions:

- A single adult, whether with or without children, is working full-time.
- Two adults, with or without children, are both working full-time, or one full-time and one part-time, or one full-time and one not working.
- A single adult without children is male, either age 19-50 or age 51 plus.
- Two adults without children are one female and one male, age 19-50 or age 51 plus.
- A single adult with children is female, age 19-50.
- Two adults with children are one female and one male, both age 19-50.
- Child 1 and child 3 are male.
- Child 2 and child 4 are female.
- Child 1 is age 4-5.
- Child 2 is age 9-11.
- Child 3 is age 13.
- Child 4 is age 14-18.

Shift-Share Analysis

Shift-share analysis is a method for measuring the source of job growth (or decline) in a local economy. Shift-share is used to understand the sources of change in an economy.

- **National Growth**: National growth indicates how many jobs a local economy would have gained (or lost) as a result of the growth (or decline) of employment at the national level. For example, consider a local economy with 100,000 jobs at the beginning of the time period. If during the period under consideration, the number of jobs in the United States grew by a rate of 2%, then at the end of the time period under consideration, the local economy would be expected to have 102,000 jobs.
- **Industrial Mix**: Industrial mix indicates how many jobs a particular industry within the local economy would have gained (or lost) if the local industry grew (or declined) at a rate similar to the industry as a whole in the United States. For example, if 1,000 people were employed in the finance industry in the local economy at the beginning of the period, and the finance industry as a whole in the U.S. grew at a rate of 10%, then at the end of the time period under consideration, the local finance industry would be expected to have 1,100 jobs.

- **Competitive Share**: Competitive share is the remainder of the number of jobs observed. From our example, the local economy should have grown by 2,100 jobs. If the local economy actually grew by 3,100 jobs, then 1,000 jobs were because the local economy grew faster than expected, given national and industry trends.
- **Percent Competitive Share**: This is the percent of total jobs that are sourced from competitive share. A competitive share of 80% would indicate that 80% of the jobs during the time period were derived from the competitive share.

Location Quotient

The location quotient measures the relative concentration of the number of jobs in an area, as compared to the national average. A location quotient of one can be interpreted as a region having a similar proportion of its workforce engaged in an industry as the nation. A location quotient of more than one indicates the area has a higher portion of its workforce employed in the industry. Conversely, a location quotient of less than one indicates the area has a lower share of its workforce in the industry. Location quotients are used to understand relative strengths.

Financial Activities Definition

All industries identified in this report following the North American Industry Classification System and can be found at https://www.naics.com/.

The definition for financial activities includes:

- Banking (banks, credit unions, etc.)
- Insurance (agents, etc.)
- Real estate (agents, brokers, etc.)
- Rental and leasing (apartments, property managers)

Data Sources

Extension combined multiple data sources to produce this report:

- On the Map, United States Census Bureau, http://onthemap.ces.census.gov/
- Quarterly Census of Wages and Employment (QCEW), Minnesota Department of Employment and Economic Development, http://mn.gov/deed/data/data-tools/qcew/
- EMSI, Inc., Economic Modeling Systems, http://www.economicmodeling.com/ (subscription is required)
- Local Area Unemployment Statistics, Minnesota Department of Employment and Economic Development, http://mn.gov/deed/data/data-tools/laus/
- Harvard Cluster Mapping Project, Harvard and the U.S. Economic Development Administration, http://www.clustermapping.us/
- United States Census, United States Census Bureau, http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

APPENDIX 2: INSTRUCTIONS FOR TRACKING DATA

The Faribault EDA would like to track the data provided in this report over time. This appendix details how to access the data provided in this report. Extension pulled much of the data incorporated into this report from the Economic Modeling Systems Inc. (EMSI) database. EMSI is a paid subscription data service in which the University of Minnesota maintains a subscription.

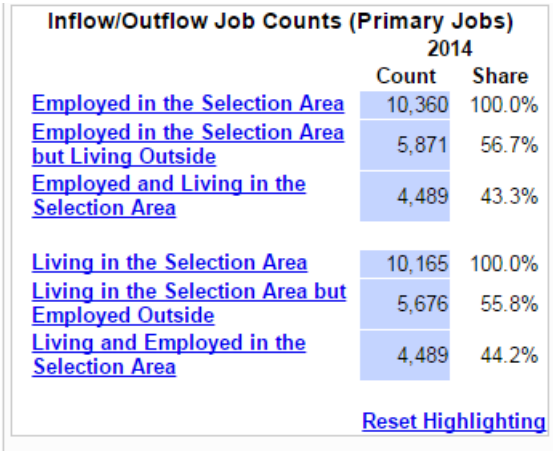
EMSI's underlying data comes from state and federal sources and is accessible via their public websites. However, EMSI uses proprietary methods to categorize the data, fill in missing data, and present the data in an easy-to-use format. Where possible, this appendix will provide detail on how to access the free data, but it may take additional work on behalf of Faribault staff to download the data and format it to match the data reported here.

Extension is also providing Faribault a spreadsheet of the historical data provided in this report. All charts that measure change over time and that come from public data have a tab in the spreadsheet.

Commuting Patterns

Process for retrieving commuting patterns data:

1. Navigate to http://onthemap.ces.census.gov/
2. In search box, enter "Faribault"
3. Select "Faribault, city"
4. Map of Faribault appears—in middle of map, select "perform analysis on selection area"
5. On analysis settings—under analysis type, toggle "inflow/outflow"
6. On job type, toggle "all jobs"
7. On bottom right, select "go"
8. This will generate the map used as Map 1 in this report.



Inflow/Outflow Job Counts (Primary Jobs)

	2014 Count	2014 Share
Employed in the Selection Area	10,360	100.0%
Employed in the Selection Area but Living Outside	5,871	56.7%
Employed and Living in the Selection Area	4,489	43.3%
Living in the Selection Area	10,165	100.0%
Living in the Selection Area but Employed Outside	5,676	55.8%
Living and Employed in the Selection Area	4,489	44.2%

Reset Highlighting

Process for retrieving industry employment data:

1. Navigate to http://onthemap.ces.census.gov/

2. In search box, enter “Faribault”
3. Select “Faribault, city”
4. Map of Faribault appears—in middle of map, select “perform analysis on selection area”
5. On home/work area, select “home”
6. On analysis settings—under analysis type, toggle “area profile”
7. On job type, toggle “all jobs”
8. On bottom right, select “go”
9. Results display on right side pane. You can also print a detailed report from the left-hand pane. If you do this, you can download to Excel.
10. This will generate the data for which industry people who **LIVE** in Faribault work.
11. To get the industry for people who **WORK** in Faribault, start the process over and select “work” under home/work.
12. Reminder: people who both live and work in Faribault will be included in both sets of data (there will be overlap).
13. This is the data for Chart 1.

Unemployment Rates

Process for retrieving unemployment data:

1. Navigate to https://apps.deed.state.mn.us/lmi/laus/
2. Select “large Minnesota cities” and then hit submit
3. Then select “Faribault, Rice” and hit view current statistics
4. Then select “See historical data for these areas”
5. Results can be copied and pasted to Excel or downloaded

Total Employment and Employment by Industry

For the total employment and employment by industry, Extension used EMSI, which is a private, subscription-based service. Similar data is available from the Department of Employment and Economic Development (DEED). Please note the data presented in the report may not perfectly mirror the data on DEED’s website. EMSI uses a proprietary method to fill in missing data.

Process for retrieving industry data:

1. Navigate to https://apps.deed.state.mn.us/lmi/qcew/ResultsDisp.aspx
2. On top left, select “change”
3. Select “Minnesota cities < 20,000 employees”
4. Select “Faribault, Rice”
5. Then you can change the dates, type of ownership, and industries, as needed

Chart 3 – Total employment over time

1. For Chart 3, click change industry, then select “total of all industries”

2. Also, for chart 3, click time period, hold the select key, and scroll down to select multiple time periods
3. Note: you get multiple tabs, so in addition to seeing employment, you can also see establishments and wages
4. You can download to Excel (see tiny button under QCEW results)

Chart 4 – Employment by industry

1. For chart 4, change ownership to "total of all ownership"
2. If you only see part of a year, you can change the year to the previous year

Chart 5 – Employment by industry compared to Greater Minnesota

1. For chart 5, you can change the select area. Since Greater Minnesota is not an option, you might just compare to Minnesota

Chart 6 – Jobs by manufacturing sector

1. For chart 6, you'll want to change the industry
2. Once you select change industry, a list will appear
3. To the left of each industry is a plus sign
4. Click on the manufacturing plus sign
5. Another manufacturing will appear with a plus sign—click on that
6. Select all the manufacturing sectors listed

Chart 7 – Manufacturing over time

1. For chart 7, you'll want to change the industry
2. When the industry list appears, select manufacturing
3. You'll also need to change the year
4. A list of years will appear; hold the select button and scroll to select multiple years

Average Weekly Wage

The average weekly wage data is also available on the QCEW website, so follow the same general instructions:

1. Navigate to https://apps.deed.state.mn.us/lmi/qcew/ResultsDisp.aspx
2. On top left, select "change"
3. Select "Minnesota cities < 20,000 employees"
4. Select "Faribault, Rice"
5. Then you can change the dates, type of ownership, and industries, as needed
6. Data displays employment as default; click on the average weekly wage tab to see that data

Chart 8 – Average weekly wage by industry

1. Change ownership to "total of all ownership"

2. Select “average weekly wage” tab

Chart 9 – Average weekly wage by industry with Minnesota

1. Follow steps for Chart 8
2. Change select area to “Minnesota”
3. Select “average weekly wage” tab

Chart 10 – Average weekly wage for comparison cities

1. Change select area to “comparison city of choice”
2. Change ownership to “total of all ownership”
3. Select “change industry”
4. Select “total all industries”
5. Select “average weekly wage” tab

Shift-Share Analysis

Extension uses EMSI for shift-share analysis. EMSI calculates shift-share automatically. This is part of the paid subscription. Shift-share analysis can be calculated manually, but it requires **significant effort** (several hours). To calculate change in the number of jobs, you can simply follow the directions above to use the DEED website to determine the number of jobs in period 1 and then in period 2. This will at least allow you to see if the number of jobs has increased or decreased.

To do shift-share analysis, you’ll also need the change in the total number of jobs in the United States and the change in the total number of jobs in the industry in the United States. These figures are available at http://data.bls.gov/cgi-bin/dsrv?en (or on the Bureau of Labor Statistics website, under the “Quarterly Census of Employment and Wages” dataset).

You can find instructions for calculating shift-share here: http://www.andrew.cmu.edu/user/jp87/URED/readings/Shift_Share.pdf (or other places online).

If you want the shift-share data, Extension recommends contacting either Extension or your DEED representative. The ease of shift-share analysis (and the reduced burden of time on the analyst), is one of the main reasons Extension subscribes to EMSI.

Industry Clusters

Process for retrieving cluster data:

Navigate to http://www.clustermapping.us/

1. You may want to consider creating an account, though not necessary
2. Select the “region” tab, and then select “view data by region”
3. Scroll down to bottom, to search box and enter “Faribault”
4. Select “Faribault, MN micropolitan area”
5. It will bring up dashboard for Faribault
6. Select “cluster portfolio” tab
7. For chart 11, click on the “specialization” tab, and scroll down

8. For charts 12 and 13, scroll back up
9. For chart 14, on right hand side of page, select “local” (instead of traded)

Occupational Data

Extension pulled the occupational data for Charts 15 and 16 from EMSI (paid subscription). Similar data can be found on the Department of Employment and Economic Development (DEED) website, but the data is not available at the city-level.

1. Navigate to http://mn.gov/deed/data/data-tools/oes/
2. Click on “use the data tool”
3. Click on “start a new search”
4. Select either “Minnesota Economic Development Regions” or “Minnesota planning areas”
5. In both cases, Rice County is in the Southeast region, so select that, and hit “submit”
6. You can then choose to “view all”
7. Then you can sort by the number of jobs

Population

Extension also used EMSI, the paid subscription service, to access the population data.

Population by age data (though for fewer years) can be found in the American Fact Finder. You’ll also have to do some work to convert the data (it’s in percentages). *Note: following these steps will retrieve data from the American Community Survey. These are *estimates*. Note the margin of error can often be high (also displayed). Data should be interpreted with caution.

1. Navigate to http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
2. Select “advanced search” and then “show me all”
3. On left hand side, select “topics,” then “people,” then “age and sex”
4. Click on “age,” then close dialogue box
5. On left hand side, select “geographies,” then on drop down menu, select “places,” then “Minnesota,” and then “Faribault city” and click “to add to selections,” then close the dialogue box
6. There will be a table in the middle of the page; select “age and sex”
7. Data for Faribault will display

The project population changes were also taken from EMSI. You can find population by age in American Fact Finder, but it does not provide projections. Note this will give you age by sex, so you’ll have to add together for total population. Margin of error can also be large here.

1. Navigate to http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
2. Select “advanced search” and then “show me all”
3. On left hand side, select “race and ethnic groups,” then select the tab for “detailed groups”
4. Click on “all available races,” (in middle box, may have to read the list to find), then click “add,” and then close dialogue box

5. On left hand side, select “geographies,” then on drop down menu, select “places,” then “Minnesota,” and then “Faribault city” and click “to add to selections,” then close the dialogue box
6. There will be a table in the middle of the page; select “sex by age”
7. Data for Faribault will display

The Minnesota State Demographer publishes projections for changes in race and ethnicity. It is only at the county level and does not provide age breakdowns, but it does point to change demographics. Population projects can be retrieved here: http://mn.gov/admin/demography/data-by-topic/population-data/our-projections/

Education

Educational attainment data was also retrieved from EMSI.

The data can be found on American Fact Finder. Note when using American Fact Finder, selections you make will remain unless you clear them. This will affect the results of your search.

1. Navigate to http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
2. Select “advanced search” and then “show me all”
3. On left hand side, select “topics,” then “people,” then “education”
4. Click on “educational attainment,” then close dialogue box
5. On left hand side, select “geographies,” then on drop down menu, select “places,” then “Minnesota,” and then “Faribault city” and click “to add to selections,” then close the dialogue box
6. There will be a table in the middle of the page; select “educational attainment”
7. Data for Faribault will display

Income

Income data can be retrieved from the American Fact Finder database. Note if you’ve been using American Fact Finder for other data, you’ll need to clear it before you follow these steps.

8. Navigate to http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
9. Select “advanced search” and then “show me all”
10. On left hand side, select “topics,” then “people,” then “income and earnings”
11. Click on “income and earnings (households),” then close dialogue box
12. On left hand side, select “geographies,” then on drop down menu, select “places,” then “Minnesota,” and then “Faribault city” and click “to add to selections,” then close the dialogue box
13. There will be a table in the middle of the page; select “selected economic characteristics”
14. Data for Faribault will display

Cost of Living

Cost of living data is found at the Department of Employment and Economic Development (DEED) page.

1. Navigate to https://mn.gov/deed/data/data-tools/col/
2. Region type should default to county; if not, set to county
3. Data will appear on bottom of page
4. Can use radio buttons to adjust for number of working members and number of children in household